

# **NOTICE**

**All drawings located at the end of the document.**

#### 4.1.2 Building 771

Seven (7) new and two (2) existing monitoring well locations have been chosen to monitor groundwater quality associated with Building 771 and associated buildings 771C and 774. Three (3) wells will be positioned south of Buildings 771 and 774 to monitor upgradient groundwater quality, and six (6) wells will be positioned north and west of Buildings 771, 771C, and 774 to monitor downgradient groundwater quality. Figure 1-2 illustrates the location of these wells with relationship to Building 771 and surrounding features. The total number and arrangement of wells reflects the spatial distribution of potential contaminant releases at the building and uncertainty regarding unsaturated areas in the vicinity. Individual well locations were determined with respect to potential contaminant source areas (as reviewed in the HRR), and an assumed northerly groundwater flow direction. Well names were assigned based on the five digit numbering system adopted by ER in 1992. The rationale for each new monitoring well location is summarized in Table 4-2.

*Table 4- 2 Building 771 Monitoring Well Location Rationale*

Well Number	Location	Rationale
40599	NW corner B771	Monitor downgradient groundwater quality
40699	North side B771, 70 feet west of NE corner	Monitor downgradient groundwater quality
40799	North side B771C, center of building	Monitor downgradient groundwater quality Building 771C, specifically process lines leak
40899	South side, south wing B774	Monitor upgradient groundwater quality, specifically six process waste tanks
41399	South side, southwest corner B771	Monitor upgradient groundwater quality
41499	North side B771, center of building	Monitor downgradient groundwater quality
41599	North side B774, center of building	Monitor downgradient groundwater quality
20998	West side near northwest corner B771	Monitor downgradient groundwater quality
18199	South side, southeast corner B771	Monitor upgradient groundwater quality

**Table 7- 2 PARCC Parameter Summary**

PARCC	Radionuclides	Non-Radionuclides
Precision	Duplicate Error Ratio $\leq 1.42$	RPD $\leq 30\%$ for Organics RPD $\leq 30\%$ for Non-Organics
Accuracy	Detection Limits per method and ASD Laboratory SOW	Comparison of Laboratory Control Sample Results with Real Sample Results
Representativeness	Based on SOPs, SAP, and analytical methods	Based on SOPs, SAP, and analytical methods
Comparability	Based on SOPs and SAP	Based on SOPs and SAP
Completeness	90% Useable	90% Useable

Data validation will be performed according to KH-ASD procedures, but will be done after the data is used for its intended purpose. Analytical laboratories supporting this task have all passed regular laboratory audits by KH-ASD.

## 8.0 SCHEDULE

Well installation activities are scheduled to begin in mid August, 1999. Well development and groundwater sampling will commence within one week of well completions. Measurement of water levels from existing monitoring wells for potentiometric map construction will be conducted within one week of groundwater sampling.

## 9.0 REFERENCES

Ashtech 1993, *Ashtech XII GPS Receiver Operating Manual*, Version 7

DOE 1992a, *Historical Release Report for the Rocky Flats Plant*, Rocky Flats Plant, Golden, CO

DOE 1992b, *Final Phase I RFI/RI Work Plan for Operable Unit 9, Original Process Waste Lines*

DOE 1993, *Background Geochemical Characterization Report*, September

DOE 1994, *Final Interim Measures/Interim Remedial Action Decision Document for the Rocky Flats Industrial Area*, Rocky Flats Plant, Golden, Colorado, March

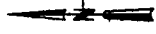
DOE 1998, *Rocky Flats Environmental Technology Site, Integrated Monitoring Plan, FY98/99*, August

08/16/99

**Figure 1-2**  
**Building 771 Site Location**  
**Existing and Proposed Monitoring Wells**

- EXPLANATION**
- Program Wells
  - ◆ All Other Wells (Abandoned Wells Not Included)
  - ▲ Location of Proposed Monitoring Wells
- Industrial Area Operable Units**
- Pertinent B771 HSSs
- Standard Map Features**
- Buildings and other structures
  - ▨ Solar evaporation ponds
  - Lakes and ponds
  - Streams, ditches, or other drainage features
  - - - Fences and other barriers
  - Contour (20-Foot)
  - == Paved road
  - - - Dirt roads

NOT A SCALE  
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Scale = 1:1160  
 1 inch represents approximately 87 feet



State Plane Coordinate Projection  
 Colorado Central Zone  
 Datum: NAD27

U.S. Department of Energy  
 Rocky Flats Environmental Technology Site



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